1. What is our purpose?

1a) To inquire into the following:

- **transdisciplinary theme**

Where We Are in Place and Time

An inquiry into orientation in place and time; personal histories; homes and journeys; the discoveries, explorations and migrations of humankind; the relationships between and interconnectedness of individuals and civilizations, from local and global perspectives.

- **central idea**

Over time changes in technology and transportation have influenced how our homes and communities function.

Class/grade: 1st Grade Age group: 6 years

School: Willard IB Magnet School code: 7550

Title: Where We are in Place and Time

Teacher(s): Elaine Kaiteris, Marisela Figueroa, Dianne Cahir, Donna Irie, and Lindi Killen

Date: 9/25/17-11/3/17

Proposed duration: 90 hours over 6 weeks

1b) Summative assessment task(s):

What are the possible ways of assessing students' understanding of the central idea? What evidence, including student-initiated actions, will we look for?

Students will demonstrate their understanding of the central idea by doing a project/presentation of their choice including how technology and transportation have changed how and where people live. Teacher will assess students' ability to explain how these changes have impacted society.

By the completion of this unit students will demonstrate their ability to take personal action such as:

- Take steps to reduce their environmental footprint.
- Use modes of transportation with low environmental impact such as walking and biking
- Recycle e waste and regular waste
- Recognize and encourage family and friends to use alternative ecologically friendly power resources.
- Students may identify and write letters to corporations that could improve their fuel and power resources.

2. What do we want to learn?

What are the key concepts (form, function, causation, change, connection, perspective, responsibility, reflection) to be emphasized within this inquiry?

Key Concepts: Form, Connection, and Change
Related Concepts: Community, Systems, Culture

What lines of inquiry will define the scope of the inquiry into the central idea?

- How homes and communities have changed over time
- Technological advancement and transportation systems
- How technology and transportation have changed how and where people live

What teacher questions/provocations will drive these inquiries?

1. How have changes in technology influenced homes and modes of transportations?
2. How have communities changed over time?
3. How has movement of people changed communities?
4. What are the different forms of transportation?
5. How does culture, belief systems, and economics affect the existence of different modes of transportation?

Provocations:
OTQ viewing of pictures modes of different transportation from different times and locations pictures of other technologies that affect communities.

3. How might we know what we have learned?

This column should be used in conjunction with "How best might we learn?"

What are the possible ways of assessing students' prior knowledge and skills? What evidence will we look for?

- Thinking Maps: circle map, tree map
- KWL Charts
- OTQ using pictures of technology and transportation systems over time.
- Class discussions

What are the possible ways of assessing student learning in the context of the lines of inquiry? What evidence will we look for?

Through various resources (literature, resource books, or the internet) the teacher will assess students'

- be able to explain different types of transportation
- explain how advancements in technology and change in modes of transportation have changed communities
- tell how technology has changed daily living within their homes
- understand and explain how technology affects the environment, good or bad.

Through discussions and multiple perspectives students will:

- be respectful of other cultures and the way they choose to live
- understand how choices due to belief systems determine types of technology and transportation methods used.
- be empathetic towards those who lack the ability to have access to technological advancements and forms of transportation due to poverty and equity issues

4. How best might we learn?

What are the learning experiences suggested by the teacher and/or students to encourage the students to engage with the inquiries and address the driving questions?

1. Students/teachers will research technological advancements and transportation methods.
2. Teacher/students will provide literature about communities in order to: identify compare and contrast transportation systems and changes due to technological change throughout the world and over time.
3. Teacher/students will identify the benefits and drawbacks of technological advancements.
4. Students will identify how life has changed due to technology.
5. Students/teachers will investigate how the movement of people has/can changed societies and cultures.
6. Teachers/Students will investigate how belief systems affect technology and transportation choices.
7. Teachers/Students will investigate how economics, locations, and issues of power and privilege affect the availability of different types of technology and transportation.
8. Students will use flow maps to show how communities changed over time,.students will design their own low impact mode of transportation and build models and design possible future inventions or modes of transportation that may change society.
9. Teacher/ students will explore related stemscopes: communication

What opportunities will occur for transdisciplinary skills development and for the development of the attributes of the learner profile?

Transdisciplinary Skills

Social: group decision making as students decide areas of interest for research

Research: interpreting data as the children understand technology in the past, present, and how it' impacted communities, collecting, recording, organizing and presenting data as students research how communities, homes, technology, and transportation have changed over time.

Thinking: Acquisition of knowledge, comprehension, application analysis, and synthesis as students become about the changes of communities over time.

Self management skills, Organization, Time management, Safety

Profile:

Thinker-The students will realize the thought processes needed for innovation in technology and transportation .

Knowledgeable- Students research technology and transportation and how it has changed throughout time and place.

Principled-The students will be principled with information gathering and research practices.

Open Minded-The students will be open to change and come to the understanding that there are many possible solutions to problems

Attitudes:

Creativity- as students compare and contrast changes and advancements in transportation and technology and design new future advancements and changes in .

5. What resources need to be gathered?

What people, places, audio-visual materials, related literature, music, art, computer software, etc, will be available?

Poems, Library books - references, Slide show, Field Trips: walking tour(s), Photos, transportation systems over world, Guest speakers, Teacher resource books: If you lived a Hundred Years ago, Little House, Long Ago and Today, Transportation, Then and Now, The House on Maple Street, My own Backyard, A Changing America City Scape, Since 1920. (see powerpoint as well for copy of some of the pages), Brainpop, Jr.

How will the classroom environment, local environment, and/or the community be used to facilitate the inquiry?

Classroom will be in cooperative structure, organized so students can research in areas of interest in cooperative groups and sometimes at stations. Community people in careers related to transportation and community change may come as guest speakers. Students may take different forms of transportation such as the local metro.